

Gamma 666 is thus five times more effective than DDT for young flies. With older adult domestic flies, the LD<sub>50</sub> doses were 1 mg. and 8.21 mg. respectively, or an eight-fold superiority for gamma 666. An even greater superiority was shown with the second species of flies. With *Calliphore* spp. the surface LD<sub>50</sub> was 0.6 mg. for gamma 666 and 9.28 mg. for DDT, 16-fold superiority for gamma 666.

Not only does gamma 666 show superiority in its effective lethal dosage, but it has an equally important superiority in its "knockdown rate." Insects show symptoms of poisoning (tremors, ataxia, convulsions, falling, prostration) much sooner after gamma 666 than after equivalent

doses of DDT. This is important, since a faster knockdown rate implies less time for ranging and oviposition.

## REFERENCES

1. Bracey, P., and David, W. A. L.: British Insecticide Development Panel, 44:170, 1944.  
McGovran, E. R., Gersdorff, W. A., Fales, J. H., and Piquett, P. G.: Ibid. 44:209, 1944.
2. Savit, J., Kollros, J. J., and Tobias, J. M.: Proc. Soc. Exp. Biol. and Med., 62, 44 (May), 1946.

W. H. MANWARING, M.D.,  
P. O. Box 51,  
Stanford University, California.

## ECZEMA "KEYSTONE OF SKIN DISEASE"

## SAY TWO NEW YORK DOCTORS

"Eczema occupies a unique position in the field of dermatology," according to two New York doctors writing in the current issue of *Hygeia*. "It is, not only the wastebasket for all unexplained eruptions with characteristic symptoms, but it is also the keystone of skin disease."

The authors—Howard T. Behrman and Oscar L. Levin—class eczema as a common inflammation of the skin. The symptoms are redness, itching, small blisters, and the discharge from the skin of a fluid that stiffens linen, and tends to dry into scales and crusts. However, the authors emphasize that eczema is not communicable.

Heredity plays a role in this disease. According to the authors, "some people are apt to develop eczema because of family tendencies. Blondes and redheads usually have sensitive skins that are irritated by sun, wind and other agents. Other people are susceptible to eczema because of an infection in the teeth, tonsils or sinuses. People with dry or oily skins may be predisposed to skin eruptions. People with dry skins are easily irritated by soap, and, in general, lack sufficient resistance to skin infections. There are people whose sweat glands do not function well. Consequently, they don't perspire enough to remove irritants from the skin or to cool the body."

Another factor which may be responsible for eczema is poor nutrition. The authors state that "lack of vitamins may lower skin resistance to the disease. Lack of vitamin A can cause a type of eczema complicated by pus formation. Lack of vitamin B can cause scaling of the nose and lips. Deficiency of various elements of the vitamin B family can cause a peculiar eruption on the arms and legs."

Various internal parts of the body influence the skin in

the development of eczema. Among these the authors list poorly functioning glands, such as the thyroid, upset stomach, liver and kidneys.

"These conditions," write the physicians, "and others, can predispose a man or woman to eczema. In other words, they are indirect causes. There are also causes directly responsible for it. Some people are hypersensitive, or allergic, to drugs or proprietary remedies which may do others good. If the hypersensitive individual takes these drugs, it may easily produce a skin disorder, or predispose him to it."

"If you have a skin eruption, it may be possible that a supposedly harmless laxative, tonic, or blood purifier in your medicine chest is either the cause or part of the cause of your trouble. Perhaps you get a rash in the spring or fall of the year. You probably attribute it either to the weather or astrology. It's more likely to be caused by the insect spray or moth destroyer you use during these seasons."

One of the first steps in the treatment of this condition is to determine the cause and then, if possible, to eliminate it. If the disease is acute, the itching must be relieved and the inflammation reduced as soon as possible. Normally, the patient will be given wet dressings and soothing lotions at this stage.

In chronic, or long-standing eczema, the skin becomes thick and leathery. "When this stage is reached, the cure becomes a long and difficult task," state the authors. "In some cases of obstinate eruptions, x-ray treatment, administered by an expert, may produce a cure when other methods have failed."

